

### REMARKS

This is in response to the Office Action mailed on December 4, 2006 and a telephone call with the Examiner on February 16, 2007. In the Office Action, claims 1-17, 20-23, 32 and 33 were rejected as being either anticipated by, or obvious in view of, Loatman US Patent No. 4,914,590. Independent claims 1 and 10 have been amended and the remaining claims are unchanged in the application. The Examiner indicated that these amendments would definitely advance prosecution in this case.

The present system allows a developer to debug natural language parses, which are represented as parse trees that correspond to input text. The parse trees are generated by combining small text fragments into larger text fragments at connecting points in the parse tree. The larger text fragments are referred to as “constituents” and are generated at the connecting points by applying grammar rules to the text.

In prior natural language processing systems that generate parse trees, a developer can modify incorrect parse trees only by viewing a rule which was applied to generate an improper constituent. The developer is thus required to manually recall other rules, which may apply to the children which are joined together to form the improper constituent at the selected connecting point, and to manually apply those rules to correct the parse tree. The present system, however, allows a developer to correct a parse tree simply by viewing alternate rules, which are alternates to the rule used in generating the constituent at the selected connecting point, and by selecting one of those alternate rules to apply at the selected connecting point.

Loatman does not do this. In Applicant’s last amendment, Applicant argued that Loatman does not display alternate rules, which are alternates to the rule applied in generating a constituent, but instead only displayed candidate rules. In other words, the parser in Loatman (cited by the Examiner) specifically has not generated a constituent by applying a rule. Instead, as shown in FIG. 19, the parser was unable to recognize a word. FIG. 19 expressly states “dirty not recognized.” FIG. 19 also shows some definitions for “dirty” which might be used in generating the parse. Therefore, those definitions can only be considered as candidate definitions

because no definition as yet been used. They can not be considered alternate definitions which are alternates to a definition that has already been used in generating the parse.

In response, in the most recent Office Action, the Examiner states that in order to reach any type of analysis of the word “dirty” the parser must have applied some type of parsing rule. Specifically, the Examiner stated “for the parse was inherently initiated with a current rule in order to determine dirty was not recognized, which inherently passes dirty through the parsing process, which includes an inherent parsing rule...”. This is simply not correct.

Regardless of whether a rule was applied in Loatman in order to generate the display indicating that “dirty” [was] not recognized”, that display is not a “constituent”. Therefore, the display in FIG. 19 cannot meet the limitations in claim 1 of “determining whether a rule was applied to form a constituent at said selected connecting point...; and if the determination is positive, displaying a plurality of display items..., the display items including alternate rules, other than the rule used in generating the constituent at the selected connecting point.” (Emphasis added). FIG. 19 of Loatman does not generate any constituent by applying a rule, and therefore it cannot show alternate rules, which are rules other than that used to generate the constituent. Thus, Loatman cannot anticipate claim 1.

Further, independent claim 1 has been amended to more specifically indicate that the term “constituent” means that the two children at the selected connecting point are joined together. Specifically, claim 1 states “determining whether a rule was applied to form a constituent at the selected connecting point, the constituent representing at least the two children joined together...”. Thus, Loatman’s analysis of the word “dirty” not only fails to show a constituent, but it also fails to determine whether a constituent was formed by applying a rule to join two children of the selected connecting point. Since that is not shown by Loatman, Loatman cannot show “alternate rules applicable at the selected connecting point to form constituents...”, which are alternates to the rule used in generating the constituent. Thus, claim 1 should be allowed.

Independent claim 10 is drawn to a method of analyzing and debugging natural language parses which also includes “determining whether a rule was applied to successfully

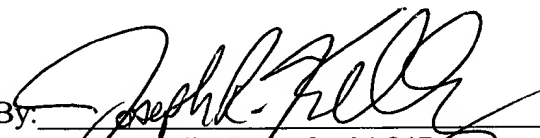
form a constituent, formed by joining at least the two children, at the selected connecting point; and displaying a first plurality of menu items... including an alternate grammar rules display item which, when activated, displays alternate grammar rules comprising grammar rules for generating constituents that are alternates to the rule applied in generating the constituent formed at the selected connecting point in the parse tree.” Because the figure cited by the Examiner in Loatman does not even show a “constituent”, it cannot “determine whether a rule was applied to successfully form a constituent...”. Further, Loatman cannot teach that the rule is applied to form the constituent, wherein the constituent is “formed by joining the two children...”. Thus, Loatman does not show: a constituent, determining that a rule was successfully applied to generate the constituent, that the constituent is formed by joining two children of the selected connecting point, alternate grammar rules for generating a constituent that are alternates to the rule applied in generating the constituent formed at the selected connecting point in the parse tree. Thus, Loatman cannot teach or suggest independent claim 10.

In conclusion, Applicant submits that independent claims 1 and 10 are allowable over Loatman. Claims 2-9, 11-17, 20-22 and 32-33, which depend from the independent claims, are allowable as well. Therefore, Applicant respectfully requests reconsideration and allowance of claims 1-17, 20-22 and 32-33.

The Director is authorized to charge any fee deficiency required by this paper or credit any overpayment to Deposit Account No. 23-1123.

Respectfully submitted,

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